

**NOMBRE Y APELLIDOS**

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**TEMA1. LA ORGANIZACIÓN DEL CUERPO HUMANO .VOCABULARIO**

**De cada palabra escribe su definición, un ejemplo si te lo pido y su traducción al inglés. No olvides pegarlas en tu cuaderno.**

- a) Tejido. Ejemplo
  
- b) Órgano. Ejemplo
  
- c) Aparato o Sistema. Ejemplo
  
- d) Unicelular. Ejemplo
  
- e) Pluricelular. Ejemplo
  
- f) Célula
  
- g) Citoplasma
  
- h) Orgánulo. Ejemplo
  
- i) ADN
  
- j) Núcleo
  
- k) Tejido Óseo

## THE ORGANIZATION OF THE HUMAN BODY.

Here you have 5 key words of this Unit. You have to study them. If you include more definition in your notebook, you will have extra points in your notebook marks.

1. **Cell:** basic structural and functional unit of an organism.
2. **Organ:** set of tissues grouped together to perform specific functions.
3. **Organelle:** special compartment inside a eukaryotic cell that performs a specific function.
4. **Eukaryote:** organism made of cells that have a nucleus.
5. **Multicellular:** containing more than one cell.
6. **Tissue:** collection of specialised cells that perform a specific function. Epithelial tissue, Adipose tissue, muscle tissue...

1. Mitochondrion	2. Nuclear envelope	3. cytoplasm
4. tissue	5. kidney	6. system
7. organelles	8. heart	9. organ
10. skull	11. stomach	12. ribosome
13. Bladder	14. brain	15. bone
16. Bone marrow	17. bladder	18.
19. Stem Cell	20. gut	21. lung

## THE CELL

All living things are made up of one (single-celled organisms) or many cells (multicellular organisms): the cell is the organisational unit of living things.

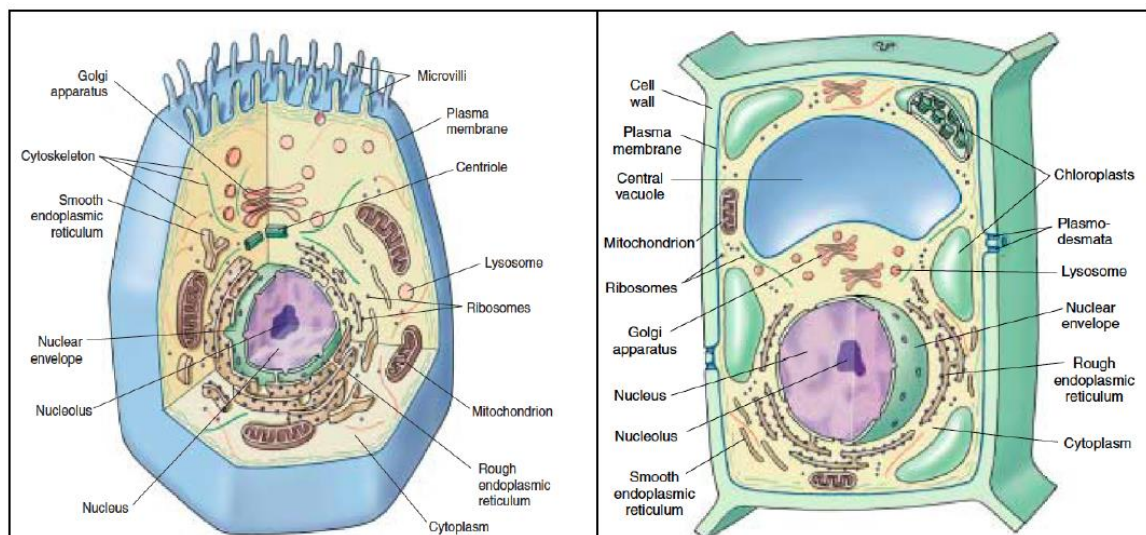
The cell carries out the three vital functions that characterise living things: it is the functional unit of living things.

There are two types of cell:

- **Prokaryotes:** these do not have a nucleus, so genetic material is dispersed throughout the cytoplasm. They are more primitive cells, such as those of bacteria.
- **Eukaryotes:** these have a nucleus surrounded by a membrane. They make up the rest of living things, including animals and plants. Eukaryotic cells can be plant or animal cells. We know if they are plant or animal cells because plant cells have a rigid cell wall outside the plasma membrane. Plant cells also contain special organelles, called chloroplast, where photosynthesis takes place.

## Cell organisation in a multicellular organism

Tissues form organs, like the heart. Organs are made of a specific type of tissue and carry out a specific function. Related organs work together in systems, such as the digestive system (whose organs include the stomach and the intestine). All the systems together form a multicellular organism.



As you can see from the above pictures the interiors of eukaryotic cells contain numerous organelles. The organelles are membrane-bounded structures that close off compartments within multiple biochemical processes can occur simultaneously and independently.

1. Here you are the functions of some organelles. Find out what organelle is responsible of each one

FUNCTION	ORGANELLE
<i>A thick, rigid layer that provides support and protection.</i>	
<i>Where photosynthesis takes place.</i>	
<i>Where substances produced in the endoplasmic reticulum are processed.</i>	
<i>Responsible for cell respiration.</i>	
<i>Sacs that contain storage or waste substances. They are much larger in plant cells.</i>	
<i>The inside of the cell that contains the nucleus and the organelles.</i>	
<i>Where proteins formed in the ribosomes are stored and processed.</i>	
<i>Contains the genetic material of the cell.</i>	
<i>Encloses the cell and regulates the substances exchanged between the inside and the outside of the cell.</i>	
<i>Sites of protein synthesis.</i>	

2. Choose the correct option:

- Prokaryotic cells *have/don't have* a nucleus.
- Prokaryotic cells are *more/less* primitive.
- Eukaryotic cells *have/don't have* a membrane around a nucleus.
- Eukaryotic cells *can/can't* be plant or animal cells

3. Complete the sentences with the correct words:

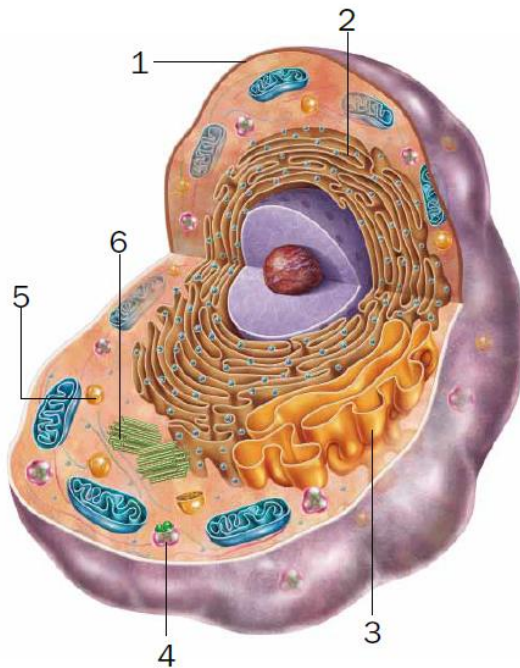
**Cytoplasm- membrane-nucleus- vacuoles**

- A \_\_\_\_\_ is a thin layer that separates the cell from the outside environment.
- The inside of a cell is called the \_\_\_\_\_
- The \_\_\_\_\_ contains all our genetic material
- \_\_\_\_\_ are membrane-bound vesicles that store different substances.

4. Say whether these sentences are true or false and, if they are false, rewrite them correctly.

- The nuclear membrane controls the passage of substances from the interior to the exterior of the cell and vice versa.
- The cytoplasm controls the functions of the cell thanks to the DNA it contains.
- The plasmatic membrane separates the cell from the medium.
- The nucleus contains the cell's genetic material and different organelles that can be inherited.
- The DNA is in the cytoplasm.

Identify the cell organelles shown in the image.



5. Fill in the gaps with the word which fits best:

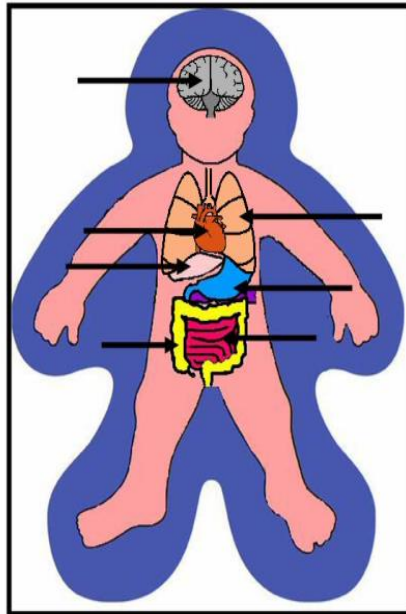
- A group of cells with a similar structure and function is called an \_\_\_\_\_.
- We find tissues in organs, for example the \_\_\_\_\_ and \_\_\_\_\_.
- \_\_\_\_\_ perform specific functions and form systems.
- The stomach and intestine are part of the \_\_\_\_\_ system.

6. Classify the words below in this table:

**Adipose- heart- kidney- nerve- respiratory- excretory-skin- stomach**

Tissue	Organ	System

7. Label the 5 “Internal Body Organs”, at least, in the image



8. IDENTIFY THE BODY SYSTEMS FOR EACH BODY PART FROM THE FOLLOWING CHOICES: **circulatory, digestive, endocrine, excretory, muscular, nervous, reproductive, respiratory, skeletal**

Small Intestine - Skull- Biceps- Spinal Cord- Lungs- Kidney - Aorta  
Oesophagus - Femur - Ovary- bladder- White Blood Cells

9. Find out what organs make up the following systems in humans:
- a) Digestive system:
  - b) Respiratory system:
  - c) Circulatory system:
  - d) Excretory system:

10. Read the statement below.

“In certain tissues in an adult there are cells that are still able to divide and differentiate themselves indefinitely. They are stem cells. Why are these cells important for science and for our health?”

Research the topic of stem cells and write a short text (80-100 words) on your finding.

